Geophysical Research Abstracts Vol. 17, EGU2015-2593, 2015 EGU General Assembly 2015 © Author(s) 2015. CC Attribution 3.0 License.



## Validation of SARAL/AltiKa data in the Amazon basin

Joecila Santos da Silva (1), Stephane Calmant (2), Daniel Medeiros Moreira (3), Robson Oliveira (1), Taina Conchy (1), Marie-Claude Gennero (4), and Frederique Seyler (5)

(1) Universidade do Estado do Amazonas, Manaus, Brasil (joecila@yahoo.fr), (2) Institut de Recherche pour le Developpement, Toulouse, France, (3) Serviço Geologico do Brasil, Rio de Janeiro, Brasil, (4) Centre National d'Etudes Spatiale, Toulouse, France, (5) Institut de Recherche pour le Developpement, Montpellier, France

SARAL/AltiKa is a link between past missions (since it flies on the ERS-ENVISAT orbit with Ku band nadir altimeters in LRM) and future missions such as SWOT's Ka band interferometry swaths. In the present study, we compare the capability of its altimeter AltiKa to that of previous missions working in the Ku band such as ENVISAT and Jason-2 in retrieving water levels over the Amazon basin. Same as for the aforementioned preceding missions, the best results were obtained with the ICE-1 retracking algorithm. We qualitatively analyze the impact of rainfalls in the loss of measurements. Since making long -multi mission- time series is of major importance either for hydro-climatic studies or for basin management, we also present an estimate of the altimeter bias in order that the SARAL series of water level can be appended to those of these previous missions.